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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,702	06/23/2003	Kazuto Kobayashi	NUM-0158	5741

23353 7590 10/08/2004

RADER FISHMAN & GRAUER PLLC
LION BUILDING
1233 20TH STREET N.W., SUITE 501
WASHINGTON, DC 20036

EXAMINER

ALI, MOHAMMAD M

ART UNIT PAPER NUMBER

3744

DATE MAILED: 10/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,702

Applicant(s)

KOBAYASHI ET AL.

Examiner

Mohammad Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (EP 0691517 A1) in view of Izumi (3,858,406). Hirota discloses an expansion valve 10 comprising a cassette unit/a unit 15, a housing/casing 11 having a refrigerant path and accommodating the unit 15 via seal 34; wherein the unit 15 comprises a pipe/barrel 38, a refrigerant path formed to the pipe member/barrel 38, a flange member/a large diameter head 38a connected to end of the pipe member/barrel 38, a lid member covering the flange/ large diameter head 38a, a diaphragm 23 disposed between the flange member/large diameter head 38a and the lid member, and a valve mechanism 33/40 for transmitting a displacement of the diaphragm to a valve member 33 so as to control the flow of refrigerant. Hirota also disclose first housing refrigerant

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path 13 and second housing refrigerant path 12. Hirota discloses the invention substantially as claimed as stated above. See Fig. 1 However, Hirota does not disclose an integrally formed housing of the expansion valve with an evaporator. Izumi teaches the use of an integrally formed housing of an expansion valve 14 with an evaporator 10, the expansion valve 14 is placed in the refrigerant collecting chamber/tank 36 in refrigerant system for the purpose of efficient running of a refrigeration system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the expansion valve of Hirota in view of Izumi such that the expansion valve could be integrally formed with the evaporator. Regarding claim 2, it is a case of product by process and there is no patentable weight for a specific process or method for the product. Another way, this invention relates to an apparatus and therefore, there is no patentable weight of process/method combined with an apparatus.

Response to Arguments

Applicant's arguments filed 09/07/04 have been fully considered but they are not persuasive. The Applicant argued, "Claim 1, as amended, is directed to an expansion valve that includes a cassette unit containing major components of the expansion valve and a housing. Claim 1 recites that the housing has a housing refrigerant path extending along a longitudinal direction and cassette unit receiving hole in fluid communication with and extending transversely to the refrigerant path and sized for accommodating the cassette unit via a seal member. Claim 1 also recites that the cassette unit includes a pipe member, a cassette unit refrigerant path formed to the pipe

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member, a flange member connected to an end of the pipe member, a lid member covering the flange member, a diaphragm disposed between the flange member and the lid member, and a valve mechanism for transmitting a displacement of the diaphragm to a valve member so as to control the flow of refrigerant. Further, claim 1 also recites that the housing is formed integrally with an evaporator of an air conditioner.

It is respectfully submitted that the rejection is improper because the applied art fails to teach each element of claim 1 as we propose to amend it. Specifically, it is respectfully submitted that the applied art fails to teach a cassette unit and housing having a housing refrigerant path extending along a longitudinal direction and cassette unit receiving hole in fluid communication with and extending transversely to the refrigerant path and sized for accommodating the cassette unit via a seal member. As a result, it is respectfully submitted that claim 1 is allowable over the applied art.

Claims 2-4 depend from claim 1 and include all of the features of claim 1. Thus, it is respectfully submitted that the dependent claims are allowable at least for the reason claim 1 is allowable as well as for the features they recite.

Withdrawal of the rejection is respectfully requested." The examiner disagrees. The Primary prior art to Hirota (EP 0691 517) clearly teaches a cassette unit 15 and a housing 11 having a housing refrigerant path 13 extending along a longitudinal direction and cassette unit 15 receiving hole in fluid communication with and extending transversely to the refrigerant path 12/13 and sized for accommodating the cassette unit 15 via a seal member 33/34/43. See Fig.1 and 2. Therefore, the rejections are proper.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad Ali whose telephone number is 703-308-5032. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Esquivel Denise can be reached on 703-308-2597. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Mohammad M. Ali
October 5, 2004


William E. Tapolca
Primary Examiner
Art Unit 344